

LAKE: KEZAR P (VLMP 17)
TOWN: FRYEBURG
COUNTY: OXFORD

MIDAS: 9709
TRUE BASIN: 1
SAMPLE STATION: 1

WHOLE LAKE INFORMATION

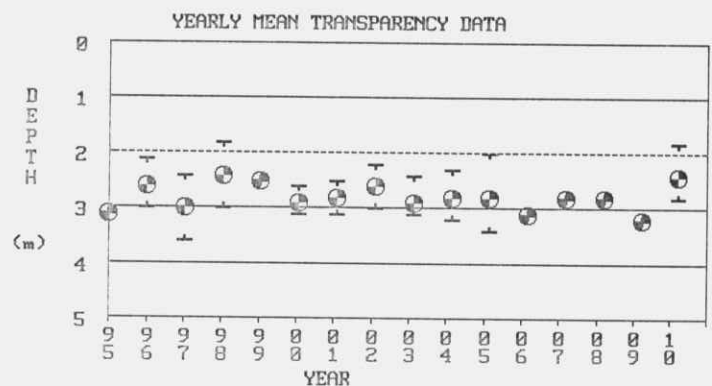
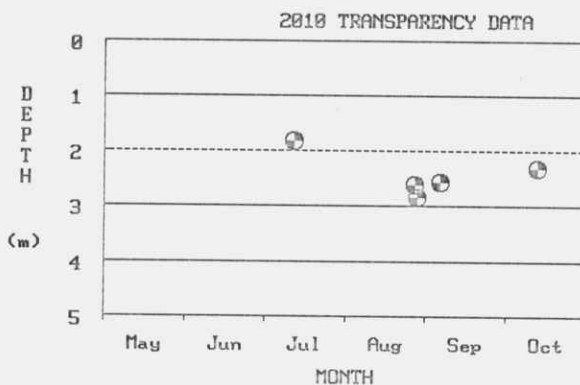
MAX. DEPTH: 4 m. (12 ft.)
MEAN DEPTH: 2 m. (7 ft.)
DELORME ATLAS #: 10
USGS QUAD: FRYEBURG
IFW REGION A: Sebago Lake (Gray)
IFW FISH. MANAGMENT: Warmwater

TRUE BASIN CHARACTERISTICS

SURFACE AREA: 743.0 ha. (1835.9 a.)
FLUSHING RATE: 0.70 flushes/yr.
VOLUME: 42668123.0 cu. m. (34612 ac.-ft.)
DIRECT DRAINAGE AREA: 43.98 sq. km. (16.98 sq. mi.)

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. KEZAR P has 1 True Basin(s).

SECCHI DISK TRANSPARENCY GRAPHS:



Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visible at bottom of lake (or one reading used in calculation was visible)].

YEAR	MEAN COLOR (SPU)	MEAN pH	MEAN ALK (mg/l)	MEAN COND. (uS /cm)	TOTAL PHOS. MEANS (ppb)				SECCHI DISK (m.)				CHLOROPHYLL A(ppb)			TROPIC STATE INDICES			
					EPI	SURF	BOT.	PRO.	MIN.	MEAN	MAX.	N	MIN.	MEAN	MAX.	C	G	SEC	CHL
1995	-	-	-	-	-	15	-	-	3.1*	3.1*	3.1*	1	-	-	-	-	-	-	-
1996	39	6.52	8.0	-	-	-	-	14	2.1	2.6*	3.0	6	3.8	12.4	21.0	-	-	-	-
1997	-	-	-	-	11	-	-	14	2.4*	3.0*	3.6*	5	2.4	2.7	3.0	-	-	-	-
1998	57	6.50	7.0	-	-	22	-	-	1.8	2.4*	3.0*	2	4.9	5.5	6.1	-	-	-	-
1999	-	-	-	29	11	-	-	-	2.5*	2.5*	2.5*	1	1.6	1.6	1.6	-	-	-	-
2000	30	6.50	7.0	35	15	-	-	-	2.6	2.9*	3.1*	2	2.6	2.6	2.6	-	-	-	-
2001	27	6.80	6.5	37	13	-	-	-	2.5	2.8*	3.1*	4	2.6	2.6	2.6	-	-	-	-
2002	29	6.60	7.0	47	14	-	-	-	2.2	2.6*	3.0*	5	2.3	2.3	2.3	-	-	-	-
2003	62	6.70	9.0	25	17	-	-	-	2.4	2.9	3.1	5	3.1	3.1	3.1	-	-	-	-
2004	11	6.80	8.0	27	15	-	-	-	2.3	2.8*	3.2*	6	1.6	1.6	1.6	-	-	-	-
2005	25	6.60	8.0	25	13	-	-	-	2.0	2.8*	3.4	5	3.8	3.8	3.8	-	-	-	-
2006	30	6.65	6.6	30	16	-	-	-	3.1*	3.1*	3.1*	1	3.4	3.4	3.4	-	-	-	-
2007	22	6.95	7.0	27	17	-	-	-	2.8*	2.8*	2.8*	1	2.3	2.3	2.3	-	-	-	-
2008	50	-	8.0	25	16	-	-	-	2.8	2.8	2.8	1	3.9	3.9	3.9	-	-	-	-
2009	25	6.40	8.0	31	18	-	-	-	3.2	3.2	3.2	1	3.9	3.9	3.9	-	-	-	-

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YEAR	MEAN	MEAN	MEAN	MEAN	TOTAL PHOS. MEANS (ppb)				SECCHI DISK (m.)				CHLOROPHYLL A(ppb)			TROPHIC STATE INDICES			
	COLOR	pH	ALK	COND.	EPI	SURF	BOT.	PRO.	MIN.	MEAN	MAX.	N	MIN.	MEAN	MAX.	C	G	SEC	CHL
	(SPU)		(mg/l)	(uS	CORE	GRAB	GRAB	GRAB											
2010	29	6.80	11.0	26	-	18	-	-	1.8	2.4	2.8	4	4.4	4.4	4.4	-	-	-	-
SUMMARY:	33	6.63	7.8	30	15	18	-	14	1.8*	2.8*	3.6*16		1.6	3.7	21.0	-	-	-	-

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

SAMPLE DATE																	
DEPTH	09/03/03			08/12/04		08/11/05		09/01/06		08/30/07		08/25/08		08/14/09		08/26/10	
<u>m</u>	<u>°C</u>	<u>pdm</u>	<u>°C</u>	<u>pdm</u>	<u>°C</u>	<u>pdm</u>	<u>°C</u>	<u>pdm</u>	<u>°C</u>	<u>pdm</u>	<u>°C</u>	<u>pdm</u>	<u>°C</u>	<u>pdm</u>	<u>°C</u>	<u>pdm</u>	
0.0	20.2	8.0	23.8	8.1	27.5	7.8	21.5	8.4	24.8	8.4	24.9	8.1	24.0	7.3	20.8	8.2	
1.0	20.0	8.0	23.8	8.1	27.4	7.8	20.7	8.4	24.4	8.1	23.6	7.7	23.7	7.4	20.5	8.2	
2.0	19.9	7.9	23.8	8.1	27.3	7.7	20.1	8.4	24.3	8.1	22.5	6.2	23.2	7.4	20.4	8.2	
3.0	19.8	7.6	23.8	8.0	-	-	20.1	8.3	-	-	20.2	1.5	22.0	3.7	-	-	

WATER QUALITY SUMMARY

KEZAR POND, Fryeburg

Midas: 9709, Station: 01 - Primary

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring data for Kezar Pond has been collected since 1995. During this period, 9 years of basic chemical information was collected in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of Kezar Pond is considered to be below average, based on measures of SDT, total phosphorus (TP), and Chlorophyll-a (Chla). The potential for nuisance algal blooms on Kezar Pond is moderate.

Water Quality Measures: Kezar Pond is a colored lake (average color 42 SPU) with an average SDT of 2.8m (9ft). SDT readings are often limited by depth at this site thus are an underestimate of water quality. The range of water column TP for Kezar Pond is 11 to 17 parts per billion (ppb) with an average of 14 ppb, while Chla ranges from 1.6 to 21 ppb with an average of 3.8 ppb. Recent dissolved oxygen (DO) profiles show minimal DO depletion in deep areas of the lake. The potential for TP to leave the bottom sediments and become available to algae in the water column due to low dissolved oxygen (internal loading) is low. However, sediments and phosphorus could be resuspended in the water column due to wind action.

Kezar Pond is sampled in conjunction with the Lakes Environmental Association (LEA) located in Bridgton Maine.

See ME-DEP Explanation of Lake Water Quality Monitoring Report for measured variable explanations. Additional lake information can be found on the Internet at <http://www.lakesofmaine.org/> and/or <http://www.maine.gov/dep/blwq/lake.htm>, or telephone the ME-DEP at 207-287-3901 or the VLMP at 207-783-7733.

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